

Claims

1. A method of transparentizing a portion of a paper substrate, the method comprising:
providing a paper substrate;
5 preselecting an application site on the paper substrate to be transparentized;
providing a transparentizing material;
applying the transparentizing material to a first surface of the preselected application site;
providing a first heat source;
exposing the first surface of the application site to heat supplied by the first heat source
10 for a period of time;
providing a first curing agent; and
exposing the first surface of the application site to the first curing agent for a period of
time.

15 2. The method of claim 1, further comprising applying the transparentizing material to a
second surface of the application site.

20 3. The method of claim 2, further comprising providing a second heat source and exposing
the second surface of the application site to heat supplied by the second heat source for a period
of time.

25 4. The method of claim 3, further comprising providing a second curing agent and exposing
the second surface of the application site to the second curing agent for a period of time.

5. The method of claim 1, further comprising providing sufficient time between exposure of
the application site to heat and exposure of the application site to the curing agent.

30 6. The method of claim 5, wherein the time between exposure of the application site to heat
and the curing agent is controlled by adjusting a distance between the heat source and the curing
agent.

7. The method of claim 1, further comprising heating the transparentizing material prior to applying the transparentizing material to the application site.

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a* 8. The method of claim 1, further comprising embossing a perimeter around the application site.

5 9. The method of claim 1, further comprising controlling a rate of conveyance of the paper substrate to adjust the period of time the application site is exposed to heat.

10 10. The method of claim 9, wherein the rate of conveyance of the paper substrate is from about 20 meters per minute to about 250 meters per minute.

15 11. The method of claim 9, wherein the rate of conveyance of the paper substrate is about 70 meters per minute.

12. The method of claim 1, further comprising controlling a rate of conveyance of the paper substrate to adjust the period of time the application site is exposed to the curing agent.

20 13. The method of claim 12, wherein the rate of conveyance of the paper substrate is from about 20 meters per minute to about 250 meters per minute.

14. A paper substrate comprising:

25 a single ply of suitable paper with a top edge, a bottom edge, a first side edge and a second side edge to define a sheet; and

translucent area disposed in the sheet, the translucent area being formed by a method of transparentizing including:

B preselecting an application site on the sheet to be transparentized;

providing a transparentizing material;

applying the transparentizing material to a first surface of the preselected

30 application site;

providing a first heat source;

exposing the first surface of the application site to heat supplied by the first heat source for a period of time;

providing a first curing agent; and

exposing the first surface of the application site to the first curing agent for a 5 period of time.

15. A one-piece paper assembly comprising:

a single ply of suitable paper with a top edge, a bottom edge, a first side edge and a second side edge to define a sheet;

10 a translucent area disposed in the sheet, the translucent panel being formed by a method of transparentizing including:

preselecting an application site on the sheet to be transparentized;

providing a transparentizing material;

applying the transparentizing material to the preselected application site;

providing a first heat source;

exposing the application site to heat supplied by the first heat source for a period of time;

providing a first curing agent; and

exposing the application site to the first curing agent for a period of time;

one or more fold lines traversing a width of the sheet to form one or more panel sections;

20 a line of weakening disposed longitudinally along the first side edge of the sheet to define a first marginal strip between the line of weakening and the first side edge, and a line of weakening disposed longitudinally along the second side edge to define a second marginal strip between the line of weakening and the second side edge;

25 a line of adhesive or cohesive disposed longitudinally along each of the first and second marginal strips; and

adhesive or cohesive disposed along the top edge of the sheet.

30 16. The one-piece paper assembly of claim 15, further comprising a feed strip with a plurality of pin-holes attached to each of the first and second side edges.

17. The one-piece paper assembly of claim 15, further comprising an insert incorporated with the sheet, the insert adhered to the sheet by adhesive disposed just inside lines of weakening extending longitudinally along the first and second side edges of the insert and coincident with the lines of weakening of the sheet.

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18. The one-piece paper assembly of claim 15, further comprising a return envelope incorporated with the panel, the return envelope adhered to the sheet by adhesive disposed just inside the lines of weakening and the bottom edge of the sheet to form a pocket.

10 19. The one-piece paper assembly of claim 15, wherein the translucent area being capable of receiving printing from a laser-printer or other printing device such that information or data are directly printed on the translucent area in reverse font imaging.

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15 20. The one-piece paper assembly of claim 15, wherein the translucent area is located at a predetermined position in the assembly such that when the assembly is traversely folded, the translucent area is on an outer surface of the assembly and information and data printed on an inner surface of the assembly are displayed through the translucent area.